

REMARKS

The Applicants have carefully reviewed and considered the new grounds of rejection of claims 1 and 6-9 pending in this patent application. In response the Applicants amend claim 1 to incorporate the subject matter of claim 5. Claim 5 is canceled without prejudice and claim 6 is amended to depend from claim 1. After considering the claims in their present form in view of the following comments it is believed the Examiner will agree that claims 1 and 6-9 patentably distinguish over the prior art and should be formally allowed.

More specifically, claims 1 and 6-9 very clearly patentably distinguish over U.S. Patent 5,886,306 to Patel when considered in combination with U.S. Patent 5,034,443 to Bae et al. and U.S. Patent 5,744,763 to Iwasa et al.

Independent claim 1 of the present application reads upon a structurally enhanced liner comprising a multi-layer substrate including an insulating layer and first and second structural layers. The first and second structural layers are formed from a reinforced composite comprising a non-woven mat including a plurality of chopped fibers and a polymeric material wherein the polymeric material comprises a polyvinyl chloride containing a heat stabilizer. The insulating layer comprises at least one of a non-woven fiber insulation layer, a phenolic-bound non-woven glass fiber mat, a polyurethane foam sheet, a needled fiber mat and a mixture of organic and mineral fibers formed in a lofted and semi-compacted batt. Claim 1 further provides that the substrate is then

formed so as to have at least one lofted area for insulating against the transmission of sound and heat energy and at least one compacted area for structurally enhancing the liner.

In formulating a rejection the Examiner argues that the Patel et al. patent discloses a layered acoustical insulating web for vehicles incorporating multiple layers of wood pulp which may be combined with synthetic fiber. The Examiner equates the middle layers to Applicants' "insulating layer" and the outer layers to Applicants' "structural layers". The Patel et al. reference explicitly refers to the use of starch or latex binders at col. 2 line 27 and references a vinyl acetate monomer at col. 3 line 47. The Patel et al. reference fails to explicitly teach utilizing polyvinyl chloride.

The Examiner cites the Bae et al. patent for teaching the concept of utilizing stabilizer compositions in polyvinyl chloride resins. The Applicants agree that the Bae et al. reference teaches this concept but the Applicants note that there is no basis for combining the Patel et al. and Bae et al. references as suggested by the Examiner since the Patel et al. reference does not teach the use of polyvinyl chloride.

As noted by the Court of Appeals for the Federal Circuit in *In re Laskowski*, 10 USPQ2 1397 (Fed. Cir. 1989), "[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." In this instance the principal reference to Patel et al. does not teach or suggest the use of polyvinyl chloride.

Since the secondary reference to Bae et al. only suggests utilizing stabilizer compositions for polyvinyl chloride resins, and such resins are absent from the Patel et al. reference, there is no teaching in the Patel et al. or Bae et al. reference that would lead one skilled in the art to utilize a heat stabilized polyvinyl chloride resin in a vehicle liner. In other words, the Patel et al. and Bae et al. references do not suggest the invention set forth in claim 1 or provide any reason or motivation to make that modification. The only source of the suggestion is the present application and it is well established that it is improper to utilize the present application as a guide in hindsight to resolve the issue of obviousness.

The Iwasa et al. patent is cited by the Examiner as teaching a soundproofing insulator wherein the covering layers of non-woven fabric incorporate recesses 71 and ridges 72. The Examiner equates the thicker areas to the present invention's first and second lofted areas and the thinner areas to the present invention's first and second compacted areas.

While this might at first appear to be a reasonable interpretation it does not withstand scrutiny when the Iwasa et al. invention is considered "as a whole" as required in a multitude of decisions including *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). More specifically, the Iwasa et al. patent explicitly relates to an insulator incorporating an insulating layer of loose rubber grains 11. As taught in Iwasa et al. the grains must remain loose so that the grains may vibrate and convert the sound energy into vibrational and thermal energy (see, for example, col. 5 lines 33-48). As

further noted at col. 13, the upper and lower layers are blow molded and shaped. The layers are then subsequently filled with the loose rubber grains for providing sound insulation. Accordingly, it should be appreciated that the seventh embodiment cited by the Examiner does not teach or suggest compacting the insulation layer.

Further, it should also be appreciated that the Iwasa et al. patent actually teaches away from the present invention. More specifically, the critical feature of the insulator disclosed in the Iwasa et al. patent is the loose rubber grain insulating layer. In contrast, claim 1 of the present application reads on an insulating layer comprising at least one of a non-woven fiber insulation layer, a phenolic-bound non-woven glass fiber mat, a polyurethane foam sheet, a needled fiber mat and a mixture of organic and mineral fibers formed in a lofted and semi-compacted batt. The claimed structures totally differ from and in fact the presently claimed structure for the insulating layer is contraindicated by the Iwasa et al. patent.

Based upon the teachings of the Patel et al., Bae et al. and Iwasa et al. patents, it is clear that an artisan would not have found it obvious to selectively pick and choose elements or concepts from those references so as to arrive at the claimed invention without using the present application as a guide. It is well established that simplicity and hindsight are not a proper criteria for resolving the issue of obviousness. Stated another way, there is nothing in the references that would expressly or impliedly teach or suggest the modifications urged by

the Examiner. The Examiner has failed to present any convincing line of reasoning as to why an artisan viewing only the collective teachings of the references would have found it obvious to selectively pick and choose various elements and/or concepts from those references in order to arrive at the claimed invention. The Examiner has done little more than cite references to show that one or more elements or subcombinations thereof, when each is viewed in a vacuum is known. The presently claimed invention is, however, directed to a combination of elements and that combination as set forth in claim 1 is neither taught nor suggested by the references. Accordingly, the present situation is very similar to that confronted by the Board of Patent Appeals and Interferences in *Ex parte Clapp*, 227 USPQ 972 (Bd. Pat. App. & Int. 1985) and claim 1 should be allowed.


Claims 6-9 which depend from claim 1 and are rejected on the same grounds are equally allowable for the same reasons.

In summary, all the pending claims patentably distinguish over the prior art and should be formally allowed. Upon careful review and consideration it is believed the Examiner will agree with this proposition. Accordingly, the early issuance of a formal Notice of Allowance is earnestly solicited.

Any fees required in connection with this Response may be debited to Deposit Account 50-0568.

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Respectfully submitted,

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